

EXPRESS MAIL LABEL NO.: EL746147355US

CLAIMS

1. A method on an information processing unit performing steps for creating a user interface (UI) to assemble a document that conforms to a particular document type definition, the method comprising:

receiving a user selection for a document type;

selecting one of a plurality of document type definition types based upon the document type received;

parsing one or more of a plurality of elements in the document type definition types selected;

mapping to one or more interface controls each of the plurality of elements;

presenting a UI editor by assembling the one or more interface controls without presenting specific document type definition syntax to a user;

receiving a user input for zero or more content objects that are associated with the interface controls; and

aggregating the content objects associated with the interface controls.

2. The method according to claim 1, wherein the step of selection a plurality of document type definition types includes document type definition types selected from the group of document type definition types consisting of DTDs and XML Schemas.

3. The method according to claim 1, wherein the step of presenting a UI includes presenting a UI selected from the group of UIs consisting of a graphical user interface (GUI) and an interactive voice response (IVR) system.

4. The method according to claim 3, wherein the step of presenting a UI includes presenting a UI which is a what-you-see-is-what-you-get (WYSIWYG) interface.

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5. The method according to claim 3, wherein the step of presenting a UI includes presenting a UI which is a wizard.

6. The method according to claim 1, wherein the step of mapping includes interface controls selected from a group of interface controls consisting of an icon, a pull-down menu, a button, a selection box, a progress indicator, an on-off checkmark, a scroll bar, a window, a window edge for resizing the window, a toggle button, a form, and a UI widget.

7. The method according to claim 1, wherein the step of parsing includes parsing one or more of a plurality of elements to determine a type and a hierarchical context and wherein the step of mapping to one or more interface controls includes mapping the type and context to one or more interface controls.

8. The method according to claim 7, wherein the step of mapping further includes the sub-step of retrieving a user's profile to determine which of the one or more interface controls are mapped to each of the plurality of elements.

9. The method according to claim 8, wherein the sub-step of retrieving a user's profile includes retrieving a user's profile from a group of user's profile information consisting of a national language, a user preference, an authorization and a preferred output device type.

10. The method according to claim 7, wherein the step of parsing includes parsing one or more of a plurality of elements to determine a hierarchical context based on an Xpath.

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11. The method according to claim 8, wherein the step of parsing includes parsing one or more of a plurality of elements to determine a type selected from a group of types consisting of a single line input, a multiple line input, a choice element, a pull-down menu, a button, a selection box, an on-off checkmark, a toggle button, and a UI widget.

12. The method according to claim 11, wherein the step of parsing includes parsing at least one composite element comprising two or more types.

13. The method according to claim 1, where in the step of presenting a UI editor includes assembling the one or more interface controls recursively, maintaining relational links between the one or more interface controls and each of the plurality of elements.

14. The method according to claim 1, wherein the step of aggregating further includes the sub-step of:
removing empty optional elements.

15. The method according to claim 1, wherein the step of aggregating further includes the sub-step of:
removing empty category elements.

16. The method according to claim 1, wherein the step of aggregating further includes the sub-step of:
submitting the assembled content object to be checked-in for subsequent processing.

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17. The method according to claim 16, wherein the sub-step of submitting the assembled content object to be checked-in for subsequent processing includes being checked-in as XML.

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18. A method comprising steps on an information processing system to build a UI interface for creating a document based on a document type definition without presenting the specific syntax of the document type definition to a user, the method comprising:

- 5 receiving a user selection fro an existing document;
 - determining the document type definition of the existing document;
 - retrieving a document type definition wherein the document type definition comprises a plurality of elements;
 - determining the type and context information based on the document type
 - 10 definition selection received;
 - mapping for each element in the document type definition the type and the context;
 - assembling the document type definition elements and any content from any preexisting document into a UI; and
 - 15 displaying the assembled document type definition elements and any content in a UI.
19. The method according to claim 18, further comprising the steps of:
- receiving user input to modify any content displayed; and
 - 20 modifying the content based on the user input.

20. The method according to claim 18, wherein the step of retrieving a document type definition includes a document type definitions type selected from the group of document type definition types consisting of a DTD and a schema.

21. The method according to claim 18, wherein the step of displaying includes displaying a UI selected from the group of UIs consisting of a graphical user interface (GUI) and an interactive voice response (IVR) system.

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22. The method according to claim 18, wherein the interface controls are selected from a group of interface controls consisting of an icon, a pull-down menu, a button, a selection box, a progress indicator, an on-off checkmark, a scroll bar, a window, a window edge for resizing the window, a toggle button, a form, and a UI widget.

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23. A computer readable medium containing programming instructions for creating a user interface (UI) to assemble a document that conforms to a particular document type definition, the programming instruction comprising:

receiving a user selection for a document type;

selecting one of a plurality of document type definition types based upon the document type received;

parsing one or more of a plurality of elements in the document type definition types selected;

mapping to one or more interface controls each of the plurality of elements;

presenting a UI editor by assembling the one or more interface controls without presenting specific document type definition syntax to a user;

receiving a user input for zero or more content objects that are associated with the interface controls; and

aggregating the content objects associated with the interface controls.

24. The computer readable medium according to claim 23, wherein the programming instruction of selection a plurality of document type definition types includes document type definition types selected from the group of document type definition types consisting of DTDs and XML Schemas.

25. The computer readable medium according to claim 23, wherein the programming instruction of presenting a UI includes presenting a UI selected from the group of UIs consisting of a graphical user interface (GUI) and an interactive voice response (IVR) system.

26. The computer readable medium according to claim 25, wherein the programming instruction of presenting a UI includes presenting a UI which is a what-you-see-is-what-you-get (WYSIWYG) interface.

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27. The computer readable medium according to claim 25, wherein the programming instruction of presenting a UI includes presenting a UI which is a wizard.

28. The computer readable medium according to claim 23, wherein the programming instruction of mapping includes interface controls selected from a group of interface controls consisting of an icon, a pull-down menu, a button, a selection box, a progress indicator, an on-off checkmark, a scroll bar, a window, a window edge for resizing the window, a toggle button, a form, and a UI widget.

29. The computer readable medium according to claim 23, wherein the programming instruction of parsing includes parsing one or more of a plurality of elements to determine a type and a hierarchical context and wherein the step of mapping to one or more interface controls includes mapping the type and context to one or more interface controls.

30. The computer readable medium according to claim 29, wherein the programming instruction of mapping further includes the programming instruction of retrieving a user's profile to determine which of the one or more interface controls are mapped to each of the plurality of elements.

31. The computer readable medium according to claim 30, wherein the programming instruction of retrieving a user's profile includes retrieving a user's profile from a group of user's profile information consisting of a national language, a user preference, an authorization and a preferred output device type.

32. The computer readable medium according to claim 29, wherein the programming instruction of parsing includes parsing one or more of a plurality of elements to determine a hierarchical context based on an Xpath.

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33. The computer readable medium according to claim 30, wherein the programming instruction of parsing includes parsing one or more of a plurality of elements to determine a type selected from a group of types consisting of a single line input, a multiple line input, a choice element, a pull-down menu, a button, a selection box, an on-off checkmark, a toggle button, and a UI widget.

34. The computer readable medium according to claim 33, wherein the programming instruction of parsing includes parsing at least one composite element comprising two or more types.

35. The computer readable medium according to claim 23, wherein the programming instruction of presenting a UI editor includes assembling the one or more interface controls recursively, maintaining relational links between the one or more interface controls and each of the plurality of elements.

36. The computer readable medium according to claim 23, wherein the programming instruction of aggregating further includes the sub-step of:
removing empty optional elements.

37. The computer readable medium according to claim 29, wherein the programming instruction of aggregating further includes the sub-step of:
removing empty category elements.

38. The computer readable medium according to claim 29, wherein the programming instruction of aggregating further includes the sub-step of:
submitting the assembled content object to be checked-in for subsequent processing.

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39. A system for creating a user interface (UI) to assemble a document that conforms to a particular document type definition, the system comprising:

an input device for receiving a user selection for a document type;

a file system for selecting one of a plurality of document type definition types

5 based upon the document type received;

a parser for parsing one or more of a plurality of elements in the document type definition types selected;

a map for mapping to one or more interface controls each of the plurality of elements;

10 a UI editor presented on an output device by assembling the one or more interface controls without presenting specific document type definition syntax to a user;

means for receiving user input for zero or more content objects that are associated with the interface controls; and

15 an assembler for aggregating the content objects associated with the interface controls.